

## ABSTRACT

A power bus for use in an IC is disclosed that is configured as a grid and further formed using strips formed on I/O pads such as data I/O and multi-level voltage I/O pads. An IC is disclosed comprising a power supply I/O pad and a data I/O pad which are made of a deposited conductor. The power supply I/O pad is connected to a power bus and the data I/O

5 data I/O pad is connected to circuitry. A strip of deposited conductor is formed closely adjacent to the data I/O pad wherein the strip is connected to the power bus. Parallel paths are developed within the integrated circuit to distribute power within the circuit. A similar approach is taken with respect to multi-level I/O pads. The power bus provide for reduced IR drops and

10 better power supplies to core logic within an integrated circuit.